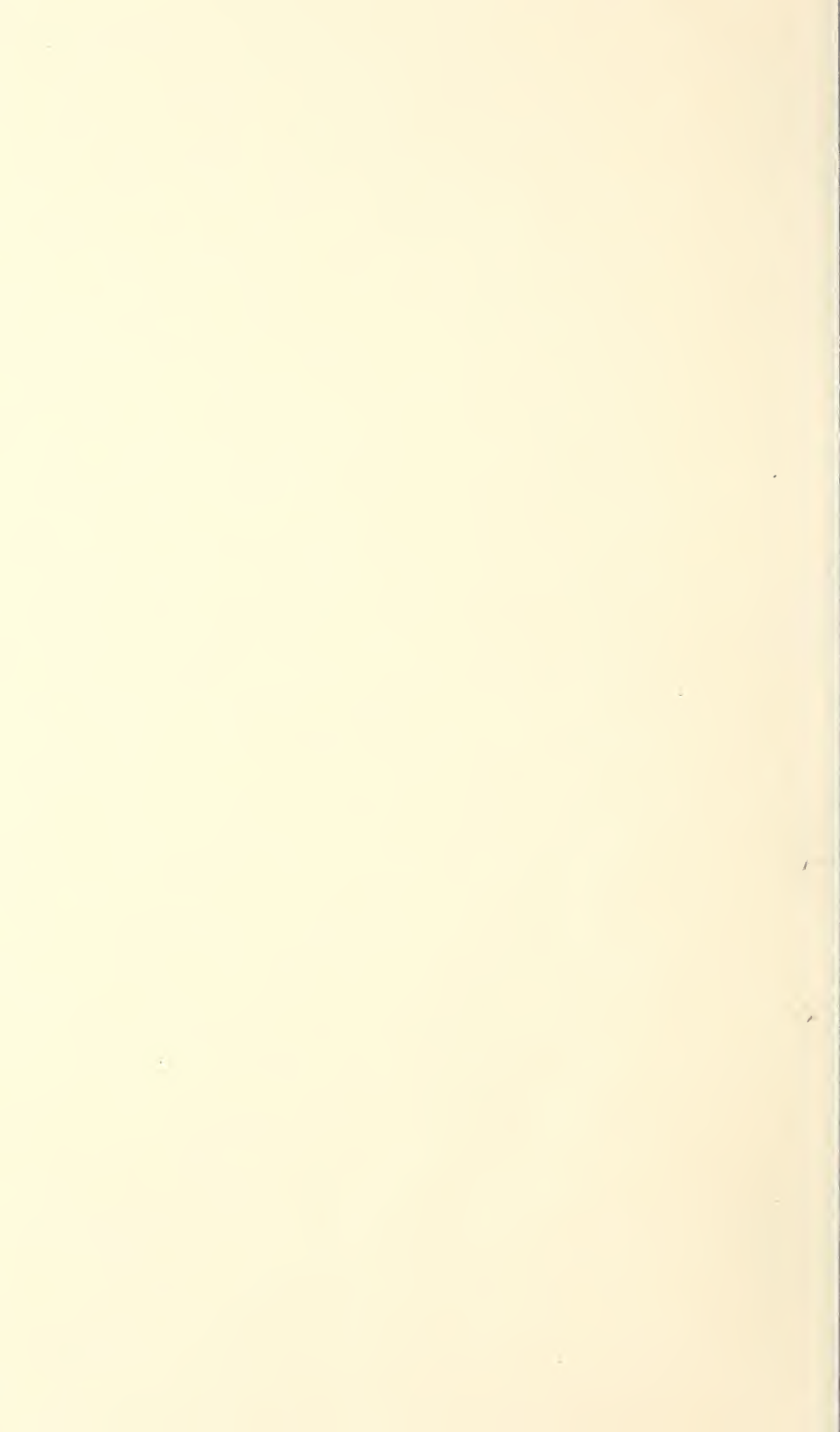


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THE AGRICULTURAL • SITUATION •

JUNE 1, 1937

A Brief Summary of Economic Conditions

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FARMERS in most sections of the country began to catch up on their spring work after the first week of May. Hardy crops, such as grains and grass, made good growth during the month. But the nights have been so cool in many areas as to delay development of truck crops. The

western Great Plains still need rain. But too much rain has delayed corn planting in large parts of the Corn Belt. Through a large part of the Middle West the spring has been so delayed that other crops—mostly corn—will be planted on ground intended for oats.

Commodity Reviews

DEMAND: Building Still Lags

A GLANCE at the major business statistics reveals little net change during the past month in the factors affecting current consumer demand for farm products in the United States. Little change is expected in the near future. The sharp upswing in business since last summer has apparently leveled off. Unfilled orders in many industries and current strong consumer demand for most types of goods, however, indicate that business is likely to hold up fairly well during the immediate future.

In general, the production of most kinds of industrial goods is now equal to or above the 1929 level. Production of goods bought largely by consumers is relatively higher than production of goods bought largely by businessmen. Building construction is the laggard in the whole array of business statistics. Building has advanced above the corresponding months of 1936 but has not advanced as sharply as have most other types of production. Residential construction is picking up, but prospects for this year are less promising than they were a few months ago because of recent large increases in construction costs.

No changes of importance have occurred in the current foreign demand situation since last month, although there are some indications of a gradual easing of world trade restrictions that may in the long run help farmers. As prices rise there is a tendency for importing countries to lower trade barriers to stem the advance in living costs. Several European countries have substantially lowered barriers on wheat because of extremely short supplies and high prices in these countries.

FARM INCOME: Highest in 7 Years

Total cash farm income in April (including Government payments) was the highest in 7 years. The total for the first 4 months of the year was also the highest for any similar period in 7 years. The decline from March to April was less than usual this year. The increase in income from marketings was general for the different groups of farm products but was greatest for wheat, cotton, potatoes, and eggs. The increase in income during the first 4 months of the year was caused by higher prices, since the volume of marketings was 5 percent smaller than in 1936. Here are the figures:

	From marketings	From Gov- ernment payments	Total
April 1937..	\$583,000,000	\$76,000,000	\$659,000,000
April 1936..	493,000,000	37,000,000	530,000,000
March 1937..	596,000,000	111,000,000	707,000,000
March 1936..	505,000,000	15,000,000	520,000,000

FARM PRICES: Down a Little

The general level of prices received by farmers dropped slightly between April 15 and May 15. Prices averaged the same on May 15 as they did on March 15. Since the first of the year farm prices have held fairly close to 30 percent above the pre-war level. Prices paid by farmers have been rising but have also averaged around 30 percent above the 1910-14 level. Thus the purchasing power of farm products has averaged at or slightly below parity during the first 5 months of 1937.

Prices of all grains except corn dropped sharply between mid-April and mid-May, as did prices of cotton, dairy products, chickens, and eggs. Fruit and truck crops were the only groups to make substantial advances. In the livestock group, declines in prices of calves, sheep, and lambs were offset by higher prices for hogs and cattle.

Index Numbers of Prices Received and Paid by Farmers

[1910-14=100]

Year and month	Prices received	Prices paid	Buying power of farm products ¹
<i>1936</i>			
May.....	103	121	85
June.....	107	120	89
July.....	115	123	93
August.....	124	126	98
September.....	124	127	98
October.....	121	127	95
November.....	120	127	94
December.....	126	128	98
<i>1937</i>			
January.....	131	130	101
February.....	127	132	96
March.....	128	132	97
April.....	130	134	97
May.....	128	² 134	² 96

¹ Ratio of prices received to prices paid.

² Preliminary.

Prices of Farm Products

Estimates of average prices received by producers at local farm markets based on reports to the Bureau of Agricultural Economics. Average of reports covering the United States weighted according to relative importance of district and States.

Product	May average, 1910-14	May 1936	April 1937	May 1937	Parity price, May 1937
Cotton, lb.....cents..	12. 7	11. 2	13. 7	12. 9	17. 0
Corn, bu.....do.....	66. 2	60. 0	119. 1	121. 2	88. 0
Wheat, bu.....do.....	90. 3	81. 6	126. 6	118. 3	121. 1
Hay, ton.....dollars..	12. 28	7. 26	12. 24	12. 11	16. 26
Potatoes, bu.....cents..	69. 5	87. 1	120. 8	109. 5	95. 6
Oats, bu.....do.....	41. 5	25. 1	54. 6	53. 5	54. 7
Soybeans, bu.....do.....	(¹)	83. 4	166. 1	174. 4	-----
Beef cattle, cwt.....dollars..	5. 50	6. 00	6. 97	7. 13	7. 14
Hogs, cwt.....do.....	7. 23	8. 59	9. 04	9. 39	9. 89
Chickens, lb.....cents..	11. 8	16. 6	15. 2	14. 8	15. 6
Eggs, doz.....do.....	16. 6	18. 1	20. 1	17. 9	² 21. 7
Butter, lb.....do.....	24. 1	26. 7	30. 3	29. 4	² 34. 0
Butterfat, lb.....do.....	24. 0	27. 1	33. 0	31. 6	² 34. 6
Wool, lb.....do.....	17. 8	25. 8	33. 2	32. 7	24. 1
Veal calves, cwt.....dollars..	6. 59	7. 43	8. 05	7. 96	9. 25
Lambs, cwt.....do.....	6. 46	8. 59	9. 19	9. 16	8. 04
Horses, each.....do.....	139. 20	100. 20	100. 20	98. 10	187. 10

¹ Prices not available.

² Adjusted for seasonality.

COTTON: Lower Prices

Spot cotton prices at the 10 markets hovered slightly over the 13-cent level during the first 3 weeks in May. This was considerably lower than the average for April, which was nearly 14 cents per pound. Cotton manufacturers have not been aggressively going into the market for cotton as they were a month or two ago, and the volume of sales of spot cotton in the 10 markets was small in the first 3 weeks of May.

American cotton mills have continued to operate at a high rate because of a large backlog of unfilled orders. For the 9 months ending with April, domestic cotton mills have used more than 6 million bales, as compared with only a little more than 4½ million bales in the same 9 months of the preceding year. Exports in April were larger than in April 1936, but total exports in the 9 months ending with April were somewhat less than shipments in the same period last season.

Weather reports from the Cotton Belt indicate that conditions have generally been favorable to the progress of the cotton crop during the last month.

WHEAT: Export Prospects

All available information still points toward a United States wheat crop considerably larger than is required for domestic consumption and building up of normal reserves. Since world wheat stocks have been reduced to far below normal by 3 successive years of small production, the American surplus should be readily absorbed in foreign markets during the next marketing year. Barriers to imports of wheat have been reduced by several European countries because of short supplies.

Because of prospects for an export surplus, United States wheat prices have for the most part adjusted to a world basis. From now on American prices will tend to be dominated by

the same factors which influence world prices. Present prospects are that world production in the next 12 months will be large enough to satisfy usual world requirements. If the crop is not greatly larger than average, world prices may be expected to average about as high as they did in the preceding 12 months. Another small world crop, increased demand, or a greatly higher general price level might result in even higher foreign prices for this year's crop than were received for the last year's crop.

During the last month both domestic and foreign wheat prices have continued to decline because of favorable new crop prospects. In years in which crop prospects continued favorable, June prices have generally averaged lower than May prices.

FRUITS: High Prices

Citrus Fruits.—California navel orange prices have made more than the usual seasonal rise in the last month, but prices of Florida oranges have declined steadily since early April instead of making the usual seasonal rise. The unusual seasonal behavior of orange prices is the result of the irregular supply situation. The California crop was considerably reduced by freeze damage, while the Florida crop is larger than average. Shipments from Florida are expected to drop off sharply in the next few weeks, and it is likely that prices of Florida oranges will show some rise before the end of the season. The seasonal rise in prices of California Valencias is expected to be greater than usual this year. Grapefruit prices are also expected to continue to rise during the rest of the marketing season. Grapefruit prices have risen more than usual since early February in spite of large market supplies.

Strawberries.—Louisiana strawberries began to move in volume the latter part of April, bringing sharp price declines. The season has been late throughout the early States, and present indications are that the inter-

mediate States also will market their berries later than usual. The total crop of strawberries in the second early and intermediate States is expected to be about the same as the small crop of last year. But this small crop and improved consumer purchasing power may be offset by the overlapping of shipments from the early States during part of the season. It seems likely that prices of strawberries from the second early and intermediate States will be about as high as last year's prices.

Apples.—Prospects for the 1937 crop appear good in all important apple producing areas. **Peaches.**—Production of peaches in 10 Southern States is forecast at about 10 million bushels, which is more than one-fourth less than last year's crop and nearly a third below the 1928-32 average. **Pears.**—Conditions during April were favorable for pears. Conditions in the South Central States have been irregular and production may be below average, but in most other sections prospects are favorable. **Grapes.**—Condition of the grape crop in California on May 1 was above the 5-year average. Present indications are for a good grape crop in all producing areas. **Cherries.**—The season is from 2 to 3 weeks later than usual in most of the important cherry producing States.

POTATOES: Large New Crop

The supply of new potatoes available for market during the next several months is expected to be almost one-half again as large as the supply available last year and nearly two-thirds larger than the average supply. Marketings of the new crop have increased sharply in recent weeks and probably will continue heavy during the next several weeks. The usual trend of prices of new potatoes is downward from the latter part of April until late summer.

Prices of old stock potatoes have followed the same downward trend as new potatoes. Prices of most varieties were generally lower in mid-May than they were a month earlier. Prices of

Idaho Russet Burbanks have been fairly stable during the last month.

TRUCK CROPS: Unfavorable Weather

Asparagus.—Total production is expected to be less than a year ago, in spite of larger acreage, because of lower yields. **Snap beans.**—Prices usually decline from April to June. Because of light supplies from Florida, prices have held up fairly well so far this year. Production in the States which market their crop during the next few months is expected to be one-fifth larger than last year's production. **Cabbage.**—Prices rose from the second week of April to early May as supplies from the early States tapered off. More recently markets have weakened as Mississippi shipments have increased. Production in the second early and the intermediate States is expected to be somewhat larger than last year.

Cantaloups.—A considerable increase in early production is expected this year. Most of the early crop comes from the Imperial Valley in California where conditions are favorable for a large crop. The second early States are not expected to produce as many cantaloups this year as they did last year. **Cucumbers.**—Production is expected to be smaller this year than a year ago. Acreage in the early producing States is smaller than it was last year. So far this season supplies have been light and prices high. **Onions.**—The early crop is expected to be smaller this year than it was last year because of unfavorable growing conditions in Texas. **Peas.**—Early production is expected to be about one-third larger than last year's crop. **Watermelons.**—Total acreage in the second early producing areas is expected to be somewhat larger than last year.

Truck Crops for Manufacture.—The total acreage of eight important vegetables contracted for by manufacturers is larger than it was in 1936. Tomatoes are the only crop for which a slight decrease is indicated.

Index Numbers of Prices Paid by Farmers for Feed

[1910-14=100]

	1936	1937
January.....	94	142
February.....	94	145
March.....	94	144
April.....	93	153
May.....	95	153
June.....	94	-----
July.....	114	-----
August.....	134	-----
September.....	136	-----
October.....	132	-----
November.....	133	-----
December.....	137	-----

FEED GRAINS: Late Season

The lateness of the spring has affected the feed grain situation in two different ways. First, the unfavorable spring weather has hindered the development of pastures which were expected to ease the feed situation. Second, some support to corn prices may have been given by the uncertainty of new crop prospects because of unfavorable weather conditions which have delayed planting. On May 1 pasture conditions for the entire country were about 12 to 14 percent below average. Conditions were most unfavorable in the Western Corn Belt where temperatures have been below average and pastures are still suffering from the severe drought of last year.

Corn supplies have reached such a low point on many farms that farmers are reluctant to market any possible surplus until their feeding requirements for the remainder of the year are more definitely known. The price of corn is expected to remain high compared with prices of small grains during the summer months. Declining prices of all feed grains are in prospect if production conditions are favorable. Other factors making for lower feed grain prices are: Unfavorable live-stock-feed price ratios, further weakening of demand from livestock producers when spring forage crops have made enough growth to furnish more feed, and large imports of corn. Im-

ports of corn totaled 9½ million bushels in March. This is the largest total for any month in the present marketing year.

HOGS: Prices Up in May

Hog prices failed to rise from January to April this year, though they have risen 29 times out of the last 37 years during those months. To make 1937 still more unusual in the eyes of the hog producer, prices rose in May. This was only the seventh time in the present century that hog prices have been higher in May than in April. The explanation of both of these unusual seasonal movements is largely in the early marketings of the 1936 pig crops caused by an extremely unfavorable hog-corn price ratio. Storage holdings of hog products have been unusually heavy, and they helped hold down the late winter rise.

Because of the early market movement of 1936 farrowed pigs, the seasonal reduction in hog marketings this summer will probably be greater than usual. The decrease in hog slaughter this summer will be partly offset by a larger-than-average movement of hog products out of storage. The total supply of hog products from marketings of hogs and from storage holdings may be larger than it was a year earlier. Hog prices are expected to average higher between now and October than they did during the corresponding months a year earlier, however, because of stronger consumer demand. The late summer rise in hog prices may be greater than usual.

The spring pig crop this year will probably be smaller than that of 1936, but, if 1937 corn yields are average or better, the 1937 crop of fall pigs is expected to be larger than that of 1936.

CATTLE: Favorable Price Outlook

Small marketings of grain-fed cattle are in prospect for the remainder of 1937. So, in view of the favorable outlook for consumer demand for

meats and for prices of hides, prices of the better grades of slaughter cattle probably will be higher in the late summer and fall than a year earlier, and possibly higher than in early spring. The normal summer decline in prices of the lower grades of slaughter cattle and of stocker and feeder cattle may be less than usual this year for the same reasons. In addition, if crop conditions are normal, demand for stocker and feeder replacement cattle is expected to be strong.

Prices of the better grades of slaughter cattle have been declining since early April when top steers reached a peak of \$16.65 per 100 pounds at Chicago. Prices of the lower grades have held steady or advanced slightly since then. The number of cattle slaughtered under Federal inspection in April (802,000 head) was 3 percent smaller than in March and 1 percent smaller than in April a year ago. Inspected slaughter of calves in April (588,000 head) was 12 percent larger than a year earlier and the largest for the month on record. The number of cattle slaughtered under Federal inspection from January through April, while not greatly different from that in the corresponding period a year earlier, was much larger than in any other year except 1918. The number of calves slaughtered was the largest for the period on record.

SHEEP: Late Lamb Crop

The early spring lamb crop this year is smaller than last year and marketings of spring lambs have been delayed by unfavorable weather and feed conditions. Only small marketings of new crop lambs are expected until July. The usual seasonal decline in new crop lamb prices will probably occur later than usual this year.

Sheep and lambs in the Western States generally are in good condition and prospects are favorable for the late lamb crop. Because of the delay in marketing early lambs, it is possible

that marketings will increase more than usual after July. Thus, though the seasonal decline in lamb prices may be later than usual, it also may be greater than average.

Prices of both fed lambs and spring lambs declined in late April but recovered about the middle of May. Ordinarily prices of fed woolled lambs are somewhat lower than prices of spring lambs. But this year, because of high prices of woolled pelts, there has been little difference in prices of the two kinds of lambs. Lamb prices, after declining in July, do not usually change greatly from August to November. This year, with marketings of early lambs delayed, the seasonal decline in prices may continue into early fall.

DAIRY PRODUCTS: Strong Butter Prices

Butter prices dropped sharply from late March to early April, but since then have been steady to higher. The usual seasonal trend is downward until June or early July. Butter prices were much higher during the first half of May than during the first half of May a year ago. Prices are expected to continue higher than in recent years because of stronger consumer demand and the higher level of commodity prices in general.

Milk production per cow rose sharply during April, and total production on May 1 was practically the same as it was a year earlier. Pasture conditions improved in April but are still much below average. With average weather this summer, production will probably be larger than in the summer of 1936. Low prices of butterfat compared with prices of meat animals and the reduced number of cows will hold down total production.

The movement of manufactured dairy products into consuming channels has been larger than a year earlier. Butter stocks on May 1 were somewhat larger than a year ago but

below average. Cheese stocks were the highest on record for the month and about 50 percent larger than the previous 5-year average.

Imports of butter are no longer arriving in this country. The seasonal decline in butter prices has narrowed the margin, so that foreign exporters can no longer profitably ship to this country.

POULTRY: Egg Production Up

Egg production increased sharply in April, and the May 1 average number of eggs laid per 100 hens in farm flocks—57.8—was the highest that has been reported for that date in the 13 years in which records have been kept by the Bureau of Agricultural Economics. Storage stocks of eggs continued to accumulate above last year's levels during the last month. Because of the larger production and

the heavy storage holdings of eggs, it is doubtful if egg prices will rise as fast as usual during the summer. The smaller hatch of young chickens expected this spring will reduce fresh supplies of eggs next fall, but this reduction will probably not offset completely the price-lowering effect of the heavy storage stocks. In early 1938, however, the 1937 crop of pullets will be a major source of eggs, and prices may be expected to be higher than those of early 1937.

Prices of chickens have risen faster than usual this spring because of stronger consumer demand for poultry. Storage stocks of frozen poultry are large. Ordinarily, chicken prices decline after June. This year prices may not decline as much as usual because of the strong demand for poultry. Any unusually heavy culling of laying flocks this summer, however, would probably cause a sharp decline.

RECENT AGRICULTURAL PUBLICATIONS

Farmers' Bulletins*

1628F. Growing Black Locust Trees—Revised.

1768F. Trapping and Transplanting Live Beavers.

Circulars*

424C. Distribution of the Varieties and Classes of Wheat in the United States in 1934.

Mimeographs**

Cotton Prices in Relation to Cotton Classification Service and to Quality Improvement.

Farm Real Estate Taxes Show Little Change in 1935.

Farmer Bankruptcies Show Further Decline in 1936.

* Requests for these publications should be addressed to the Office of Information, U. S. Department of Agriculture, Washington, D. C.

** Requests for these publications should be addressed to the Bureau of Agricultural Economics, U. S. Department of Agriculture, Washington, D. C.

On Farm Land Values

BETWEEN 1900 and 1920 many farmers of the Middle West got the idea that the way to make money was out of the rise in land values. They preached the idea that there was only so much good land, that population was rapidly increasing, and that the thing to do was to buy, no matter how high the price might be. From 1915 to 1920, wartime prices for farm products helped boost even faster the rise in farm land values.

Thousands of people have not finished paying for that speculative spree. The advance in land values between 1915 and 1920 caused millions of headaches between 1920 and 1935. Mortgages were doubled, expensive schoolhouses were built, and taxes went up to two and even three times what they were previously. It is important to remember that higher land values almost inevitably mean a heavier interest and tax burden.

On the whole, I think it is a good thing that farm land values in the United States in the spring of 1937 are only 85 percent as high as they were before the World War and only 16 percent higher than at the bottom of the depression in 1933. If farmers get their fair share of the national income during the next 10 years, farm land values will and should advance. But I hope they never advance beyond a fair relationship with farm income.

Somehow I doubt if it is a wise thing for most farm land to sell for more than 20 times the net rent after paying taxes. In other words, if cash rent is \$5 an acre and taxes are \$1 an acre, I wonder if it is wise for the land to sell for much more than \$80 an acre. In some cases where the land is likely to go down rapidly in fertility, I doubt if it should sell for this much. In other cases where the fertility is easily maintained and where there is an unusually high social value, it may be that farms can safely sell for 30 times the net rent instead of only 20 times.

Farmers, and especially young farmers, don't want a repetition of the 1920 foolishness. They want stability and security. They want to go ahead steadily year after year, feeding and clothing the people of the Nation, and getting a fair price for so doing. They want to make their money by farming and not by speculating in land. I hope the United States Department of Agriculture and the land grant colleges can cooperate with these young farmers in building for security and that we shall never again be afflicted by the excesses of a land boom. Fortunately there is no evidence of such a boom at present except in a few isolated areas. Land values are recovering in a sensible and conservative fashion.

HENRY A. WALLACE.

Cooperation on Flood Control

THREE agencies of the Department of Agriculture—the Bureau of Agricultural Economics, the Forest Service, and the Soil Conservation Service—are cooperating on a coordinated land program for flood control. The investigations of the Department of Agriculture on run-off and water-flow retardation and soil erosion prevention on watersheds is being coordinated, in turn, with the work of the War De-

partment on improvements of rivers and other waterways for flood control and allied purposes. The authority for this united attack on the flood problem was obtained on June 22, 1936, when the President approved what is known as the Omnibus Flood Control Act.

A flood control coordinating committee has been set up in the Department of Agriculture. This committee

has organized machinery and worked out relationships so that when funds are available the preliminary investigations can be started without delay. Field committees consisting of representatives of the three departmental agencies have been named to study the watersheds mentioned in the bill. Two hundred and twenty-two watersheds were set up under the act and many additions are being made by the present Congress. Field liaison officers to serve with the field committees in contacting district Army engineers have been named and are functioning.

Preliminary examinations and surveys of watersheds are two distinct features of the act. The preliminary examinations are to provide data for conclusions as to whether watershed surveys should be recommended. Surveys are costly and are not to be recommended unless there is likelihood of a worthwhile program resulting. Other objectives of the preliminary examinations are to arrive at some idea as to the cost of making surveys and to arrange the order in which the watersheds should be surveyed.

The act authorized 10 million dollars to be appropriated and expended in

equal amounts by the Departments of War and Agriculture for carrying out examinations and surveys provided for in the act. Congress adjourned last year without actually appropriating any money for this purpose. The present budget contains an item of one million dollars for this work, half of which is to be used by the Department of Agriculture.

Though the Bureau of Agricultural Economics, the Soil Conservation Service, and the Forest Service are the agencies most directly concerned in the flood control work, all other bureaus and agencies of the Department of Agriculture are cooperating in certain phases of the investigations. A flood-control liaison officer has been appointed in each departmental agency to cooperate with the departmental coordinating committee.

This type of cooperation among different agencies in the Department of Agriculture is new and is being watched with a great deal of interest. If, as seems probable, this method proves successful, it will open the doors to a broader and a more comprehensive method of departmental approach to national programs in many fields.

Farm Security

III. PHYSICAL SECURITY¹

OVER any long period there can be no enduring social and economic security on farms without physical security or stability of the farms themselves. It is a mutual cause and effect relationship. Farms cannot be maintained unless economic returns are sufficient to permit maintenance of the physical plant as well as to support a satisfactory standard of living. If returns are not sufficiently large to do both, the farm suffers first. Gradually the farm plant undergoes loss of fertility and excessive erosion. Presently the phys-

ical deterioration leads to still smaller returns, forcing a lower standard of living for the operator and, as this vicious process carries on, the amount available for maintenance of the farm dwindles away and deterioration moves at an increasing rate.

America's farm land has been treated as a mine rather than as a renewable resource. Too frequently, timber has been slashed and burned, land cleared, then farmed exhaustively for a long or short period—depending upon the original fertility of the soil—and finally abandoned. The operator

¹ This is the third of a series on farm security.

has then moved on to repeat the process or, if he has remained, has eked out a bare existence on land too barren to be operated any longer for commercial purposes. Agriculture as an industry has not set up sufficient reserves to maintain the land in a productive state of fertility or to protect it against wastage from erosion.

In general, farm operators have been aware of what was happening to their land. They have known how to farm better than they have been able to farm. Low incomes and high costs have prohibited the building up and maintaining of sufficient reserves out of incomes to do the things for the land that are needed for a permanent agriculture.

The economic system has worked in such a way as to prevent the farmer from looking upon his land as a trust to be handed on intact to posterity. Rather it has forced him to rifle the trust in order to maintain a none-too-good standard of living and to let the future take care of itself. But now society at last seems to be realizing the situation and the ultimate danger to itself through the jeopardizing of its food supply. In some manner society must make it possible for farmers to maintain the physical farm plant as a safeguard for future generations.

BUT what degree of conservation or physical maintenance should be society's goal? It is apparent that "conservation" is not an absolute but a relative term. It is not subject to precise definition except in relation to changing factors. Some enthusiastic but sentimental persons think of conservation as an end in itself—that the ideal is restoration of our land to the state in which men first found it. For certain uses of land, perhaps, such an ideal is not far wrong. For example, recreational or forestry uses. But even for such purposes, man can often improve on nature by cutting trails, providing facilities for campers, establishing fire protection, and so on.

As for agricultural land, the idea that conservation means a return to a state of nature is absurd. The American people have expended an immense amount of labor and capital in transforming the original land resource to an agricultural land resource. Land has been cleared and drained, roads built, sod broken, stones removed, fences built—all of which is designed to bring the original land into condition for use.

True conservation begins after all this. The problem is to manage land so that the investment of labor and capital will be maintained intact—so that wastage of land in its agricultural use will be prevented. But even de-limited in this way, the goal cannot be an absolute something; instead it must be continually varying and changing with changes in production methods, demands, competing supplies, population movements, and transportation facilities.

THE prevention of wastage cannot be complete when the land is used for agricultural purposes. Under the best of agricultural practices there will be some loss from erosion. There will be some loss of original fertility that will not justify replacement. There must be a constant weighing of present demands against future demands. After all, present population must be fed now. There is a point beyond which it is not socially desirable to stint for the sake of an unforeseeable future. Perhaps all that can be expected is that there will not be wanton exploitation of present resources. If present known efficient methods of production are followed, perhaps that is as much as posterity can ask.

If the proposition is accepted that conservation programs are not ends in themselves but means by which production for current and future needs is to be maintained, the objective can be achieved in ways other than conserving soil alone. The level of production can be maintained either by very strict conservation or by a con-

tinuous improvement in production efficiency. If soil resources declined rapidly, production could be maintained only by improvement in plant and animal efficiency and more efficient methods of production. Probably soil resources will decline to some degree over a long period under any

practical method of conservation. But the declining production will be offset, in part or entirely, by new and improved technics of production. Thus improved technology is a substitute in part for what we think of as soil conservation.

A. G. BLACK.

Unusual Seasonal Changes in Hog Prices

HOG prices thus far in 1937 have moved almost opposite to the usual seasonal pattern. In 29 out of the last 37 years hog prices have averaged higher in March than in January. But this year no advance occurred from January to March. Following the drought of 1934, hog prices rose sharply in the first 3 months of 1935 as hog slaughter was materially reduced. With the 1936 drought almost as severe as that of 1934, a similar advance in hog prices in early 1937 apparently was expected by producers and trade interests, but no advance in prices occurred until about mid-May. The rise in May marked the seventh time in the present century in which prices were substantially higher in May than in April.

The chief reasons for the lack of an advance in hog prices during the period from late February to April 1937 are to be found in the supply situation for hogs and hog products. Marketings of hogs did not decrease so much from December through March 1936-37 as they did during that period in 1934-35, or as they usually do. In addition storage stocks were much larger this winter than in 1934-35. The larger slaughter supplies and increased stocks apparently were the major factors that caused the trend of prices last winter to be different from that of 2 years earlier, and different from most other years.

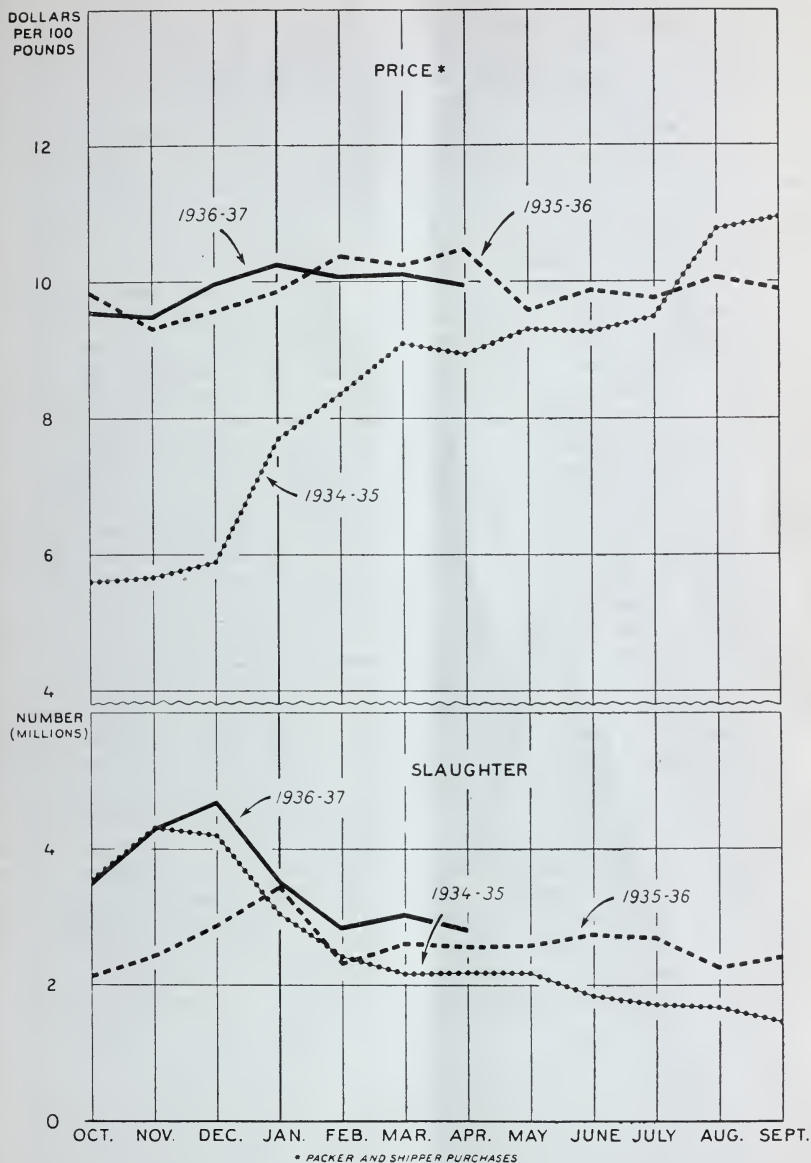
Both the spring and fall pig crops of 1936 were larger than those of 1935 or 1934, despite last year's severe drought. Hence, with the larger pig crops in

1936, the supply of hogs available for market for the year beginning October 1936 was larger than the marketings in either 1935-36 or 1934-35.

Production of corn and other feed grains in 1936 was greatly reduced by the drought but was somewhat larger than that of 1934. The winter of 1936-37 in the Corn Belt was much more severe than that of 1934-35, thereby causing feed requirements of livestock to be greater in the last winter than 2 years earlier. By early March this year the supply of feed grains was very small, being little if any larger than that in the same period in 1935. Corn prices, which had risen sharply in the last half of 1936, advanced to the highest level in more than 10 years in late March and April of this year. The hog-corn price ratio, after being relatively low last fall and winter, was reduced even more in March and April, and was almost the lowest on record for that season of the year.

The short supplies of feed grains and the unfavorable hog-corn price ratio caused farmers to market hogs from the spring pig crop of the preceding year much earlier than usual last fall and winter, and also caused marketings of fall pigs to begin much earlier than usual this spring. With early marketings of spring pigs, a considerable decrease in hog slaughter would have occurred after mid-February, but this was prevented by the early marketings of fall pigs from some areas. In other areas, notably the Western Corn Belt where feed supplies are very

HOGS: PRICE AT CHICAGO AND FEDERALLY INSPECTED SLAUGHTER, 1934 TO DATE



short, large numbers of fall pigs are being carried on grass until the new crop of small grains becomes available for feeding.

AS SHOWN in the chart, inspected hog slaughter increased somewhat more in the October-to-December period of 1936 than it did in the corresponding months of 1934. Likewise, in the first 3 months of 1937 slaughter decreased much less rapidly than it did in the same period of 1935. For the period from October through April 1936-37, inspected hog slaughter was 34 percent larger than in the corresponding period of 1935-36 and 13 percent larger than in the same months of 1934-35. These differences in hog slaughter between 1934-35 and 1936-37 are one reason for the failure of hog prices to advance early this year as they did in early 1935.

Another important reason was the much larger than average accumulation of storage stocks of hog products in the winter of 1936-37. This greater-than-average increase in storage stocks may have been partly due to the anticipation on the part of processors of a considerable advance in prices of hogs and hog products in the early months of 1937. In the case of lard it may have been caused partly by the marked public interest in speculative commodities in late 1936.

The storage situation thus far in 1936-37, following the 1936 drought, has been considerably different from that of 1934-35, following the 1934 drought. On October 1, 1936, storage stocks of hog products were considerably below average but they increased

sharply in November and December and continued to increase in January and February. At the beginning of March 1937, storage holdings of pork and lard totaling 976 million pounds were much above average and were much larger than those of either 1 or 2 years earlier. On October 1, 1934, stocks were about average; they increased in November and December 1934, but did not increase in January and February 1935, as they usually do or as they did this year.

On March 1, 1937 the increase in storage holdings of pork and lard over a year earlier, amounting to 446 million pounds, was equivalent to the products obtainable from about 2,800,000 hogs of average market weight. This increase in storage stocks at the beginning of March was nearly as large as the inspected hog slaughter during that month.

Although storage stocks of hog products continued large in April and early May, hog marketings decreased sharply during the last 3 weeks of May, and hog prices rose about \$1.25 per 100 pounds during the month. In late May the weekly average price of hogs at Chicago reached \$11.27, the highest at that market since July 1929. Ordinarily hog prices decline during May and early June as hogs from the fall pig crop are marketed in greatest numbers. But this year, unlike most other years, hog marketings were reduced materially during May, since large numbers of fall pigs were marketed in March and April, and a considerable number of such pigs apparently are being held for finishing later in the year.

PRESTON RICHARDS.

About the Causes of Depressions

DEPRESSIONS greatly reduce the demand for farm products. Declines in urban employment and buying power are reflected, in magnified fashion, in the prices of farm products and in the income of farmers. During the early 1930's, farmers lost billions of dollars of income and thousands lost their farms, as a result of the industrial depression. Although this depression was due in part to the shrinking of foreign markets for our farm products and the consequent piling up of excessive supplies, it also reflected other economic maladjustments. Farmers are deeply concerned in all the basic causes of depressions and in any contribution that Government policies can make toward preventing future depressions or reducing their intensity.

There are many theories why depressions recur. The "over-savings theory" is one which many economists believe. Briefly, this theory is: That in times of prosperity too much of the Nation's income is devoted to savings, and too little to spending on current consumption; factories and equipment to produce goods are expanded faster than the funds available to buy the resulting product; excess capacity develops; and a recession or depression follows. There are also many other theories of business cycles. While most economists agree reasonably well on why business keeps expanding when it starts up, or why it keeps contracting once it turns down, there is little agreement on why the turns come when they do. The over-savings theory is particularly interesting in this connection.

OVER-production of durable goods precedes recessions.—One fact is clear, and that is that the production of durable goods always reaches its peak, relative to production of other goods, in the periods just before recessions. This is shown clearly in

figure 1. This figure shows in the upper portion the Federal Reserve Board index of industrial production, separated into two subindexes for durable and nondurable goods. In the lower portion of the figure, the durable goods index is shown as a percentage of the nondurable. The periods when durable goods production exceeds the nondurable (as compared with the base period, 1923 to 1925) are cross-hatched. These periods occurred in 1920, 1923, 1926, and 1928-29, just before periods of business recession or depression in 1921, 1924, 1927, and 1930. In each case, once the durable goods production rose materially above nondurable, a business recession started within a year to a year and a half. During the recession, production of durable goods was sharply reduced. It is in capital goods industries that the greatest unemployment has been felt since 1929.

Increases in savings precede over-production of durable goods.—Estimates of savings recently prepared indicate that these periods of over-production of durable goods have each been preceded by marked increases of savings. These estimates are as follows:

These savings data cover savings by individuals (or rather, by those individuals whose incomes are large enough so that they pay income taxes), and by corporations. There was a marked upward trend in savings by individuals until 1928, while savings by corporations showed no distinct trend. The year-to-year movements, however, were similar in most years. Both individual and corporation savings increased sharply in 1919, 1922, 1925, and 1928; and both showed large declines in 1921 and after 1929. After 1923 and 1925 business savings declined, while individual savings increased, but at a reduced rate. Comparing these data with figure 1, it is

evident that in each case the biggest increases in savings occurred a year before the periods of relative over-production of durable goods. The decreases in savings, however, coincided with the periods of relatively low durable goods production.

Annual Savings of Persons and Corporations

Year	Estimated savings of persons	Additions to surplus of corporations ¹
	<i>Million dollars</i>	<i>Million dollars</i>
1918.....	4,375	1,956
1919.....	5,339	4,330
1920.....	5,496	1,397
1921.....	4,188	-2,685
1922.....	5,508	1,676
1923.....	6,223	2,432
1924.....	7,402	1,463
1925.....	9,787	2,851
1926.....	9,935	2,223
1927.....	10,482	996
1928.....	12,366	2,388
1929.....	11,754	2,320
1930.....	7,472	-4,255
1931.....	5,389	-7,327
1932.....	3,468	-8,001
1933.....	3,225	-4,480
1934.....	3,779	² -1,000
1935.....	4,351	² -500

¹ From "America's Capacity to Consume", for 1918 to 1928; after 1929, from corporation income-tax reports. (Net income after tax, for all corporations, minus cash dividends paid.) Both series include realized capital gains from appreciation of assets. Data for 1929 to 1935 differ slightly from those shown in figure 2, which were based on earlier estimates.

² Preliminary estimate for 1934 and 1935.

The estimates of savings by individuals and corporations cover the estimated portion saved by them out of their net income as reported on their income-tax returns. This income includes not only current earnings but also profits made on the sale of capital assets, such as real estate or securities, or "realized net capital gains." Most of the sudden increases in personal incomes, as in 1922 and 1928, occurred in the upper income groups reporting \$25,000 or more income. Capital gains are an important element in the reported income in these income groups.

These annual estimates of savings may mask to some extent changes taking place within the year, and give an appearance of lagged effect where none really exists. To explore this point,

and to determine more precisely the length of the lag, if any, between changes in savings and changes in durable goods production, the study of savings will be continued, and an effort will be made to develop a current index of personal savings on a quarterly or possibly even on a monthly basis.

Production of industrial capital follows changes in savings.—Durable goods include material for the repair and replacement of existing equipment and machinery, and for the creation of new facilities. Periods of low durable goods production correspond to periods of depletion of real capital; periods of high durable goods production, to expansion of real capital.

Examination of capital formation in a number of important lines indicates that it is in industrial concerns that capital expenditures follow most closely changes in savings, while some other forms of capital formation—such as new housing—are less closely related. The closeness of the relation between savings and industrial capital is indicated in figure 2.

In this figure the expenditure on plant and equipment by industrial and certain utility concerns ¹ is compared with the total of savings by corporations and income-tax payers. (Note that the scale is twice as large for savings as for plant and equipment.) The 1-year lag between increases in savings and expansions in plant is marked, as is indicated by the arrows.

Instability of incomes and savings contributes to subsequent depressions.—Although the savings data presented are merely preliminary estimates which rest upon an hypothesis which cannot be rigorously tested, they do show a reasonable relation to the other data. To the extent that these data can be relied upon, they strongly suggest that marked increases in savings are followed by over-formation of capital, with a resulting over-expansion of durable goods and

¹ These data are mainly from the Brookings Institution book, *The Recovery Problem*.

accompanying speculation, which lead in turn to business recession or depression.

Periods of over-saving, high production of durable goods, and speculation may be terminated by a mild recession, as in 1924 or 1927, or by a major depression, as after 1929. The intensity and duration of the subsequent depression appears to depend on other factors, including the position of the housing cycle, economic instabilities from preceding inflation in commodity or security prices, international political and economic conditions, unbalanced production in individual products, the development of new industries, and many others. The regularity of the sequence of over-

saving, high durable goods production, and depression suggests, however, that in this sequence may lie a major explanation of why the turn from prosperity to recession occurs when it does, even though the train of events after the turn depends largely on the influence of other factors.

It would follow from this that one way to defer recessions might be to reduce the extent of the changes in savings from year to year. Governmental policy, in taxing and in other ways, might well aim toward increased stability in savings.²

MORDECAI EZEKIEL.

² This aspect of the problem will be discussed in more detail in a forthcoming article in the Agricultural Situation.

FACTORY PRODUCTION OF DURABLE AND NON-DURABLE GOODS,
AND RATIO OF FORMER TO LATTER, 1919-37
ADJUSTED FOR SEASONAL VARIATION (1923-25=100)

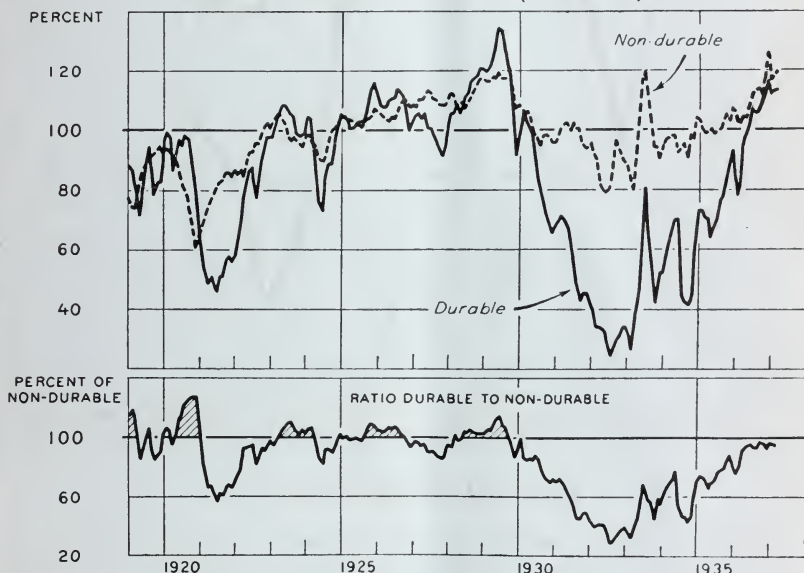


Fig. 1—When the durable goods line crosses above the non-durable goods line trouble seems to be around the corner.

SAVINGS AND INDUSTRIAL CAPITAL FORMATION



Fig. 2—A possible statistical explanation of how over-saving leads to over-expansion in durable goods production and thus makes for instability.

Practical Storage Lockers

Vegetables may be successfully preserved by freezing, without special facilities, in any cold-storage plant where rooms can be held at zero Fahrenheit. The Bureau of Plant Industry has recently demonstrated that several varieties of sweet corn,

peas, green beans, and lima beans can be stored successfully by freezing. This gives added proof of the practicability of community freezing storage rooms in which families store vegetables, fruits, and meats in individual lockers.

Income Regulates the Diet

HOW well city people eat depends in large part upon the size of the family income. If families of urban workers were enabled to completely satisfy their food wants, farmers would be called on to provide city markets with much larger supplies of dairy products, eggs, meat, fruits, and vegetables. Families who have very little to spend for food generally have inadequate amounts of milk, green leafy vegetables, and fruits—the so-called “protective” foods.

The Bureau of Home Economics has been analyzing food records of typical urban families in all sections of the country. The work is not completed, but you will be interested in some of the information that has been uncovered.

Wide differences occur in the amounts of money which families of employed city workers spend for food. Some spend as low as \$1 per person per week, some more than \$6. More than 90 percent of the families in North Atlantic cities spent between \$1.25 and \$4.35 per capita per week for food. Table 1 shows the expenditures for food of these families divided into five groups.

Average expenditures for food for the highest group were $2\frac{1}{2}$ times those of the lowest group. And here is an important fact: Average purchases of eggs, cream, ice cream, lamb, poultry, baked goods (other than bread), fruits, and succulent vegetables of the highest group were $2\frac{1}{2}$ or more times greater than purchases of the lowest group. Consumption of these foods increases most sharply as the amount of money spent for food increases. Purchases of fluid milk, meat, wheat, and ready-to-eat cereals were more than 50 percent higher for the high-expenditure group. Demand for table fats other than butter apparently declined sharply with increasing amounts of money available for food.

The rate of increase in consumption with increasing expenditures for food

is not the same for all commodities. Slightly more than half of the families studied were in two groups with average food expenditures of \$2.20 and \$2.80 per person per week. The first group bought about 18 dozen eggs per person per year, while the second group bought 24 dozen. Similar comparisons for other foods are: 110 and 125 quarts of fluid milk, 95 and 135 pounds of meat and poultry, 155 and 170 pounds of flours, meals, and cereals, and about 250 and 330 pounds of fresh or canned vegetables and fruits.

As a rule families on the lower expenditure levels bought less food and cheaper food than families spending larger amounts. They spent a larger proportion of their money for grain products, potatoes, sugar, and the cheaper fats. More of their purchases of grain products were in the form of flour and meal than in the form of baked goods. They bought more of their fat in forms other than butter, and less of their cereals in ready-to-eat form, than families at the higher spending levels.

ALARGE proportion of the families studied were spending about 40 cents per person per day for food, or \$2.80 per person per week. Analysis of the diets at this spending level showed that 27 percent of the families selected food which would yield very good diets from the standpoint of nutrition. About 65 percent of the families obtained diets which would be considered fair, and about 8 percent diets definitely poor in nutritive value. Many diets were particularly low in calcium, vitamin A, and vitamin B. Larger consumption of milk and leafy green vegetables would have reinforced these diets in calcium and vitamin A. More butter and eggs would also have provided needed vitamin A, and more dried legumes and lightly milled cereal products would have supplied additional amounts of vitamin B.

Table 1.—Food Consumption in Relation to Level of Food Expenditures ¹

Items	Estimated yearly per capita consumption, in pounds, of families spending for food per capita per week between—				
	\$1.25-\$1.87	\$1.88-\$2.49	\$2.50-\$3.12	\$3.13-\$3.74	\$3.75-\$4.37
	Or weekly per capita amounts averaging about—				
	\$1.60	\$2.20	\$2.80	\$3.40	\$4.00
Eggs.....	20.0	27.9	34.8	41.9	53.3
Milk, whole, skim, buttermilk.....	201.9	238.7	284.9	292.2	348.7
Milk, evaporated, condensed.....	15.4	11.4	15.6	15.3	9.5
Cheeses.....	4.7	7.3	8.5	8.6	11.2
Cream, ice cream.....	1.5	3.3	5.4	10.1	14.3
Total milk, fluids-not-fat equivalent.....	264.9	314.1	378.0	389.8	455.4
Butter.....	14.6	18.7	23.3	25.7	31.6
Other table fats.....	3.8	1.1	1.1	.8	.5
Cooking or salad oils, dressings.....	3.6	5.0	6.8	8.9	7.8
Lard, other cooking fats.....	5.0	7.4	8.8	6.7	7.5
Bacon, salt pork, suet.....	2.7	3.8	5.1	5.8	6.6
Total fats.....	29.6	35.9	45.0	47.8	54.0
Beef, veal.....	40.4	48.4	64.0	61.4	75.2
Mutton, lamb.....	5.9	5.5	11.9	18.9	25.5
Pork (exclusive of bacon and salt pork).....	14.4	21.3	30.0	33.0	48.2
Miscellaneous meat products.....	8.5	10.5	11.8	10.7	13.8
Poultry.....	4.4	11.0	16.4	25.9	27.7
Fish, other sea foods.....	13.2	17.9	22.5	28.0	30.6
Total meat, poultry, fish.....	86.8	114.5	156.6	177.9	220.9
Sugar.....	46.0	52.3	59.2	63.0	71.8
Sirups, jellies, etc.....	5.2	8.5	8.1	8.9	10.8
Bread, rolls.....	115.8	121.4	127.7	138.6	145.0
Other baked goods.....	16.0	26.2	35.1	46.9	45.0
Ready-to-eat cereals.....	4.3	5.7	6.3	5.8	9.0
Other breakfast cereals.....	26.0	21.0	22.2	23.4	24.4
Flours, meals.....	26.3	29.3	31.9	26.2	35.4
Total flour equivalent.....	144.8	154.8	169.3	179.7	196.0
Potatoes, sweet potatoes.....	133.4	150.1	169.7	178.2	181.1
Dried legumes, cooked or canned.....	1.3	5.2	3.4	6.9	.9
Dried legumes and nuts.....	12.3	8.4	15.0	10.0	14.2
Dried fruits.....	3.0	3.9	5.6	7.1	11.7
Tomatoes.....	19.0	25.4	33.9	37.8	38.4
Citrus fruits.....	16.5	33.8	51.1	66.4	90.4
Leafy, green and yellow vegetables.....	46.8	60.1	82.9	92.0	130.1
Other vegetables.....	28.7	39.9	55.9	79.6	71.9
Other fruits.....	49.5	86.4	104.8	137.9	161.5

¹ Families of employed wage-earners and low-salaried clerical workers in Boston and Springfield, Mass.; Berlin, Claremont, Concord, Dover, Keene, Littleton, Manchester, Nashua, and Portsmouth, N. H.; New York City and Rochester, N. Y.; Lancaster, Philadelphia, and Pittsburgh, Pa.

Average expenditures for food by employed workers vary considerably from region to region. Southern families spend less than those in the North Atlantic or Pacific regions. Half of the northern and western families studied were spending \$2.50 or more per capita per week for food. Less than one-third of the southern whites, and less than one-sixth of the southern Negro families were spending as much. Eight percent of the southern

whites and almost one-third of the Negro families were spending less than \$1.25 per capita per week. Less than 1 percent of the North Atlantic and Pacific families were on such a restricted food budget.

DIETARY habits also vary considerably for different regions. Table 2 shows the differences in consumption of certain commodities for families spending comparable amounts

for food in different regions. North Atlantic families tend to buy more milk, butter, beef, lamb, and potatoes than do southern white families but less other vegetables and fruits, fewer eggs and poultry, less pork, and less flour. North Atlantic families buy more grain products than do Pacific coast families, more poultry, pork, and potatoes, but they buy less other vegetables and fruits.

Race, too, makes a difference. White families of the South buy more eggs and milk, but less meat and flour than Negro families in the same region, spending comparable amounts for food.

The country over, families spending a small amount of money for food use only a small quantity of milk. In the South where expenditures for food are lower than in the North and West, milk consumption is correspondingly lower. Southern white families, however, buy as much milk as white families in other regions when their food

expenditures are the same. Thus the problem of increasing milk consumption in the South is largely a problem of increasing incomes in that region.

In every region, particularly in the South, there are families spending too little money to buy a fully adequate diet, however carefully the foods might be selected. But a realization of the importance of good nutrition and care in choosing an assortment of food which gives the best returns in nutritive value for the money spent, would enable a large proportion of the families now on poor diets to secure food adequate for their nutritional needs.

It is obvious from this study that general improvement in the diets of urban industrial families would call for gradual but marked changes in agricultural production. This is true whether such improvement was achieved through education in food selection or through raising incomes or both.

HAZEL K. STIEBELING.

Table 2.—Food Consumption by Families of Employed City Workers in Three Regions

Weekly per capita food expenditure, region, and color of family	Number of records	Yearly per capita consumption, in pounds, of—										
		Eggs	Fluid milk	Butter	Beef, veal	Lamb, mutton	Pork ¹	Poultry	Flour, meals ²	Potatoes, sweet- potatoes	Other fresh or canned vegetables	Fresh or canned fruits
\$1.25-\$1.87, average \$1.55:												
North Atlantic, white.....	117	20	202	15	40	6	17	4	145	133	95	66
East South Central, white.....	114	27	160	7	30	1	26	5	172	94	144	94
South, Negro.....	83	17	77	8	39	1	62	11	209	97	157	70
\$1.88-\$2.49, average \$2.15:												
North Atlantic, white.....	240	28	239	19	48	6	25	11	155	150	125	120
East South Central, white.....	97	39	229	9	41	1	35	14	180	111	181	135
Pacific, white.....	137	35	261	17	49	10	13	7	146	117	193	222

¹ Including bacon and salt pork.

² Flour as such and also in baked goods.

Farmers Hire More Help

Total employment of farms of crop reporters increased during April along with the increase in spring work, but fewer workers were employed per farm on May 1 than were at work on those farms a year earlier. Increases

in the number of farm workers were general over the country during April. The decline in the number of farm workers as compared with a year ago is explained mostly by the unfavorable weather conditions in many areas.

Displacement of Horses and Mules by Tractors

DURING the last 18 years the combined number of horses and mules of all ages on farms has decreased at an average rate of about 2.2 percent per year. On January 1, 1937, there were 16,130,000 horses and mules on farms compared with 26,436,000 head on January 1, 1919, when numbers were at a peak. This decrease of nearly 40 percent has been concurrent with an expanding use of tractors, motor trucks, and automobiles, which, together with further developments of tillage and harvesting machinery, has made possible the handling of an acreage of crops somewhat larger than the acreage of 10 or 15 years ago.

During the greater part of this 18-year period, there was no apparent shortage of work stock. Horse and mule prices continued to decline along with horse and mule numbers, and colt production was unusually low. By 1933 the scaling down process had reduced the number of animals, particularly those of younger ages, to a point where prices began to rise and interest in breeding was again resumed.

As evidence of the increasing interest in horse and mule production, the total number of colts raised in 1936 that were on hand January 1, 1937, was about 7 percent more than the number raised in 1935, but was 68 percent more than the number raised in 1931 and 1932. It is entirely probable that the 1936 increase would have been larger were it not for the adverse influence of drought in recent years. Undoubtedly the average age of horses and mules on farms is unusually high, and the need for replacing many old animals with younger ones is a factor tending to stimulate colt production. Obviously, this future tendency may be governed somewhat by the extent to which work animals are displaced by tractors during the next few years. Perhaps the number of work animals

needed for farm use is little different from the number now on farms. It is quite apparent that if the number continues to decrease, the use of tractor power will increase as a means of taking up the slack.

IT MUST be remembered that the situation confronting the producers of work animals is much different from that which confronted them during the period of agricultural expansion in the United States. Large areas of new lands for farm use are no longer available, competition between animal and mechanical power has increased, and the nonfarm outlet for work animals is practically gone.

With respect to the displacement of horses by tractors, according to the best estimates available, the number of tractors on farms increased by about 45 percent from January 1, 1925, to January 1, 1930. The number reported by the Bureau of the Census on the latter date was 920,021. Since the beginning of the depression the number of tractors on farms has increased each year, notwithstanding the greatly reduced buying power of farmers, especially in the drought areas of the Great Plains region. The rate of increase per year was slower than before the depression, but the pickup in sales which started in 1934 has continued. Estimates place the number of tractors on farms on July 1, 1935, at about 1,174,890, which is about 28 percent more than the number on farms on January 1, 1930. Domestic sales by manufacturers of tractors for farm and other purposes are reported by the United States Department of Commerce at 184,973 in 1936 compared with 137,050 in 1935, an increase of about 35 percent. No estimate is available as to the number of these which were finally bought by farmers, but the

total number now on farms is undoubtedly in excess of 1,200,000.

THE "all-purpose tractor", the development of which began about 1925, has continued to increase in popularity. In 1931, 61,940 wheeled tractors were manufactured, of which 25,831 or about 42 percent were of the all-purpose type. In 1935, 106,343, or 77 percent of the 138,084 manufactured wheel-type tractors were of the all-purpose type. A part of the gain made in 1935 was the result of the development of an all-purpose tractor of small horsepower, which is especially adapted to the smaller farms.

During the 15-year period, 1920-35, the number of all horses and mules on farms decreased by 9,134,000 head, and the number of tractors on farms increased by 877,168. Thus, for each additional tractor on farms, there was a disappearance of 10.4 head of horses and mules combined. Although according to the figures this is what happened, the comparison may be misleading. It should be remembered that a part of the reduction in horse and mule numbers was a scaling down of a surplus of work animals, partially at least because of the decreasing need for animals for nonfarm and certain types of farm use. Undoubtedly, each additional tractor did not, on the average, actually do the work of 10.4 head of work stock.

In 1920 there was an average of one tractor for approximately each 1,500 acres of crop land, not including plowable pasture. But 15 years later, or in 1935, farmers had one tractor for each 370 acres of crop land. During the same period average crop acres per head of all horses and mules on farms had increased from about 15 to 25. Naturally, the switch from work stock to tractors was much greater on some farms than on others, and in some areas than in others. A few farms became completely motorized; many farmers reduced the number of work stock substantially with the purchase of a tractor; and on many farms only

a small proportion of the work stock was disposed of after the tractor was bought.

EXAMPLES for a few States will serve to illustrate the diversity of the degree to which changes were made in different regions. In 1920, 1.5 percent of the Vermont farmers had tractors, and by 1930 the proportion had increased to 9.4. At the same time the average number of horses and mules per farm had decreased by about 0.5 of an animal. Farther South, in New Jersey, where a much greater part of the farm land is in cultivation, 2.8 percent of the farmers had tractors in 1920 and 28.5 percent had tractors in 1930. The average decrease in work stock of all ages was about 0.9 of an animal per farm. In the important corn and livestock State of Illinois, the increase in the proportion of farms having tractors was from 9.2 percent in 1920 to 30.8 in 1930, and the decrease in horses and mules per farm was about 1.7 head. In the important small-grain State of North Dakota, 15.2 percent of the farmers had tractors in 1920, and by 1930 the proportion had risen to 43.8 percent. At the same time the average number of horses and mules per farm decreased about 3 head. California, a State of great diversity of farm enterprises, had tractors on 10.3 percent of the farms in 1920 and 27.6 percent in 1930. The average number of horses and mules decreased during the 10-year period by about 2 head per farm.

Beginning with Virginia and extending through Kentucky, Tennessee, and into the more important cotton and tobacco States, the increase in use of tractors has been much less than in other sections of the country. For example, only 0.7 percent of the farmers in Georgia had tractors in 1920 and only 2.1 percent had tractors in 1930. Mule and horse numbers decreased in the same period by 0.1 of a head per farm. The number of farms in Georgia, however, decreased also by

about 18 percent. In Virginia, 1.2 percent of the farmers had tractors in 1920 as compared with 5.4 percent in 1930. Horse and mule numbers decreased about 0.5 of a head per farm.

For the United States as a whole, the proportion of farms having tractors increased from 3.6 percent in 1920 to 13.5 percent in 1930, and the average number of horses and mules per farm decreased from about 3.9 to 3.0, a reduction of 0.9 of an animal per farm. Similar compari-

sons are not available for 1935 or a later date, but tractor numbers on farms have continued to increase and horse and mule numbers to decline. From January 1, 1930, to January 1, 1937, the decline in the number of horses and mules of all ages on farms is estimated at about 3,990,000 head, and the increase in the number of tractors on farms at between 300,000 and 400,000, perhaps closer to the latter figure.

MARTIN R. COOPER.

The Ever-Normal Granary and Processors

IN THE March 1937 issue of *The Agricultural Situation*, Secretary Wallace defined the ever-normal granary. Its objective, he said, was greater stability in farm prices and farm production. With an ever-normal granary, production would be adjusted so as to adequately meet domestic requirements, take care of profitable exports, and furnish adequate reserves to protect producers and consumers against abnormal weather hazards. At the same time, it would prevent the building up of burdensome surpluses that bring very low returns to farmers.

In an effort to determine whether processors of farm products, as well as farmers and consumers, might also benefit from the ever-normal granary, an examination of the relation of price and volume to profits in the cotton-goods industry has been made. The preliminary results are presented here.

Judging from the experience of the last 15 years, it appears that the welfare of the cotton-goods industry—both of owners and workers—would be enhanced if the ever-normal granary objectives of greater stability in prices and production could be attained.

The net profits of the cotton-goods industry after taxes were paid, as reported to the United States Treasury, amounted to 64 million dollars in 1927. In 1931 the industry suffered net losses of nearly 65 million dollars. These fluctuations in earnings reflect two basic factors: the amount of cotton consumed and the course of prices of raw cotton together with price margins for cotton goods. There are, of course, many other factors that make for profit or loss, but by far the outstanding are volume and price or subordinate factors associated with them. From the year-to-year variations in prices and consumption, it is possible to determine the separate relation of each to variations in profit. In this analysis, net profits or losses for the calendar year are related to the volume of consumption in the crop year ending in that calendar year and the change in farm price during the calendar year. For example, net profits in 1927 are related to the volume of consumption in the crop year 1926-27 and the change in the farm price during the calendar year 1927. The relationships may be seen in the following tabulation:

Relation of volume of mill consumption to processing profits		Relation of cotton prices to processing profits	
Consumption (million of bales)	Profits (millions of dollars)	Change in cotton prices (cents per pound)	Profits (millions of dollars)
4.5	-75	-7.5	-90
5.0	-47	-5.0	-50
5.5	-20	-2.5	-22
6.0	0	0	0
6.5	+18	+2.5	+13
7.0	+25	+5.0	+25
7.5	+33	+7.5	+35

These relationships were developed from data for 1927 to 1932. On the basis of past relationships, a profit of 20 million dollars was forecast for 1933. Actually, the profit figure proved to be 25 million dollars. For 1934, a profit of 4 million dollars was indicated by these relationships; actually, the figure was slightly under 4 million.

With prices stable from year to year, a large volume of consumption means profits and a low volume means losses. A consumption of 7 million bales is associated roughly with profits of 25 million dollars. A consumption of about 5 million bales means losses of about 50 million dollars, because of inflexible overhead charges and for other reasons. Thus, a relatively large volume of cotton processed in 1 year and a relatively small volume the next year mean a net loss of about 25 million dollars for the 2 years compared with what would occur if a normal volume were processed both seasons.

WITH volume unchanged from one year to the next, a rise in the farm price of cotton of 5 cents per pound means a profit of 35 million dollars, and a decline of 5 cents means a loss of 50 million dollars because of changes in inventory values and in prices of cotton goods already processed. Thus, as between two seasons of abnormally advancing and falling cotton prices and two seasons of stable prices, processors are better off to the extent of about 15 million dollars with

stable prices. The understanding of this principle was undoubtedly one of the reasons why cotton processors prevailed upon the Government some time ago to maintain the 12-cent cotton loan for another season.

Not only do processors stand to gain in greater economic stability and security, but their workers also would benefit. If cotton goods activity were more regular, many manufacturing communities would enjoy greater stability in employment and therefore in the purchasing power of consumers.

Furthermore, all business interests involved in handling cotton used in domestic consumption and in supplying materials for production of cotton would enjoy greater economic stability and security. Studies of farmers' response to fluctuating prices indicate that farmers take out of production more acres when prices are 20 percent below normal than they put back into production when prices are 20 percent above normal. (In these studies "normal" is taken to represent the price which tends to keep acreage stable.) This holds true for acreages in cotton, potatoes, sweetpotatoes, cabbage, and other crops. It also is true in relation to the number of hogs on farms. Ginners, fertilizer companies, transportation companies, warehousing agencies, and all businesses that provide farmers with supplies for production, and their employees, apparently would gain if farmers' prices and changes in acreage in response to price were more stable.

L. H. BEAN.

Lower Trade Barriers for Wheat

FOR several years the United States has exported only insignificant quantities of wheat, due to short domestic supplies which resulted in domestic prices much above export levels. This year, however, prospects are that we shall have an export surplus of wheat. What are the chances of selling that surplus abroad?

Even should other wheat exporting countries have average crops this year, the prospects for export sales from the United States are better than for some years past. Stocks of wheat in both importing and exporting countries are lower than in many years. The rebuilding of these stocks, together with some possible increase in consumption as economic conditions improve, should create a broader demand for wheat and an increase in world shipments.

One of the principal obstacles to exports of wheat has been the high import barriers erected, particularly by European countries who were hopeful that in this way they could stimulate their own wheat production to the point of self-sufficiency. An encouraging development in recent months has been the fairly widespread reduction in these import barriers. Probably the principal reason for these reductions is the desire of the various governments to prevent a further increase in the cost of living. Furthermore, with higher world wheat prices, it is not necessary to retain such high import barriers in order to maintain the prices received by domestic wheat producers in the importing countries.

There is also encouragement for American wheat exporters in the declining use of export subsidies. Two or three years ago the production of wheat in a number of countries that are normally wheat importers exceeded domestic requirements. This was due partly to an increase in acreage but particularly to several years of unusually good yields. While the quan-

tity of wheat produced in these countries was sufficient for home needs, it was necessary to import hard wheat of better milling quality for mixing with the domestic wheats. It then became necessary to dispose of the surplus domestic wheat, but because of its poor quality and the prevailing low world prices, this could only be done through the payment of export subsidies.

THE reduction in supplies of domestic wheat in the importing countries as a result of more nearly normal harvests in the past 2 years and the rise in world wheat prices have made it unnecessary to continue these export subsidies. Even in Poland, which is normally an exporter of wheat, the export subsidies have been discontinued and an embargo placed on all grain exports apparently to prevent a further rise in domestic grain prices which might adversely affect living costs.

The reduction in barriers has taken different forms in different countries. In Germany, Italy, and Spain the import duties have been reduced and in the Irish Free State abolished. The reduction in Germany was from 93 cents per bushel to 11 cents, in Spain from \$1.37 to 10 cents, and in Italy from \$1.06 to 25 cents. Quantitative control of imports has been retained, however, either in the form of a government monopoly or through the issuance of import licenses.

In two other countries there have been reductions in the license taxes imposed on wheat imports. In Sweden, for example, the license tax has been reduced from 10 cents to 3½ cents per bushel, but the import duty has been retained as has the provision for compulsory milling of 80 percent domestic wheat. In Belgium the former license tax of 9 cents per bushel has been abolished.

In Denmark import permits are still required but the surtax on imported hard wheat and wheat flour has been abolished. This amounted to 18 cents per bushel on wheat and 84 cents per barrel on flour.

In the Netherlands the monopoly tax on imports was reduced from 30 cents per bushel to 15 cents.

The importance of the reductions in import barriers outlined above can be judged to some extent by the amount of wheat imported by these countries in earlier years. During the period 1925-26 to 1929-30, for example, the eight countries mentioned in this discussion imported an average of about 278 million bushels of wheat a year. In 1935-36 they imported only 112 million bushels.

It is not meant to imply that as a result of lower import barriers, imports of wheat will be restored to the 1925-29 level. As previously mentioned, a number of countries still retain a quantitative control over wheat imports. The reductions in duties and other charges are more for the purpose of reducing the cost of such wheat as is permitted to enter the country rather than for permitting appreciably greater quantities of wheat to be imported. The very number of important importing countries that have reduced their barriers, however, is an indication that imports of wheat into these countries should show an increase this year unless domestic wheat crops are much larger than now seem probable.

D. F. CHRISTY.

The Changing Puerto Rican Tobacco Industry

TWO notable changes have come over the tobacco industry in Puerto Rico during the last dozen years. One of these is of importance as affecting the economic welfare of the island as a whole, while the other bears directly on the growers themselves.

Tobacco has risen from third to second place of importance among Puerto Rican crops in value of production and exports, due to the fact that hurricanes in 1928 and 1932 were disastrous to the coffee industry, which formerly ranked second to sugarcane.

Puerto Rican tobacco, save for a small coastal production for chewing purposes, is a strictly cigar filler type. In former years some shade-grown wrappers were produced but production of these had ceased by 1928. The average production of tobacco leaf during the 7 crop years 1920-21 to 1926-27 (statistics for earlier years not being at hand) was about 30 million pounds, although this includes 1 year of abnormally high production. In comparison with this average, the

crop of 1935-36 was estimated at 26 million pounds. Thus production has been fairly steady over the last 16 years.

The United States has been the principal outlet for Puerto Rican tobacco, either in leaf or manufactured form, practically ever since occupation of the island by United States soldiers in 1898, and it is the shift in emphasis from cigars to leaf tobacco in Puerto Rico's trade with the States that represents an economic loss to the island. The extent of this shift is indicated by the statistics on the manufacture of cigars in Puerto Rico for domestic consumption and for export, the exports consisting almost entirely of shipments to the States. Throughout the period for which statistics are readily available (1907 to date) the manufacture of cigars for shipment to the States has materially exceeded those for consumption on the island.

Taking the 10-year average for the fiscal years 1917-18 to 1926-27 as a basis for comparison, manufacture of cigars amounted to 264,538,000, of

which 88,044,000, or 33 percent, were for domestic consumption, and 176,494,000, or 67 percent, were for export. The peak of manufacture was reached in the fiscal year 1925-26 with 323.1 million cigars, two-thirds of which came to the United States. In 1935-36, however, the total was 81.2 million cigars, with slightly less than two-thirds shipped to the States. This is a decline in cigar manufacturing of 69 percent from the 10-year average and 75 percent from the peak year.

A SIGNIFICANT change in the disposition of tobacco after it is produced and the locale of its manufacture has occurred. In former years a large percentage of Puerto Rican tobacco was manufactured into cigars on the island, thus providing employment and manufacturing profits to citizens of the island. But now less than 10 percent of the crop is so used. This change, aside from the decrease in domestic consumption of cigars, represents a distinct economic loss to the island. The reasons for the change are to be found, it is believed, in the change from hand methods of making cigars to machine methods, labor troubles, and the increasing concentration of the industry into fewer and larger companies that has followed the perfection of cigar-making machines.

A variation of this change relates to the cigarette industry. During the 10-year base period (1917-18 to 1926-27), 421,218,000 cigarettes were manufactured on the island mostly of native tobacco and mostly for domestic consumption. But Puerto Ricans are changing more and more to blended cigarettes shipped in from the States, so that during 1935-36 the total cigarettes manufactured on the island amounted to only 74,310,000, a decrease

of 82 percent from the base period. The losses involved in this transition apply not only to the manufacturing side of the tobacco industry but to the growers who find their outlet for tobacco noticeably contracted. It is a matter which is engaging the attention of the insular government, and experimental work is under way looking to the development of cigarette types to resuscitate this industry.

THE second change of importance, the one in which the producers are most vitally interested, relates to the class of cigars in which American manufacturers use Puerto Rican fillers. During the boom times following the war and up into the late 1920's, this tobacco was used to a large extent in class B made to retail at more than 5 but not more than 8 cents and class C cigars which sold for more than 8 but not more than 15 cents. With class A goods, retailing at not more than 5 cents, occupying a larger and larger percentage of total manufactures, the purchases of Puerto Rican tobacco today are predicated upon its use in nickel brands. This cannot but affect the prices paid to growers. A straight average of prices of Puerto Rican tobacco from 1920 to 1929, inclusive, is 29.1 cents. In 1919 a price of 54.1 cents was reported. The unweighted average from 1930 to 1936 is 18.0 cents, the reported 1936 price being 15 cents. These comparisons are subject to some qualification, however, due to the fact that during the earlier period the production included some shade-grown wrapper tobacco of materially higher value per pound than the filler type. Allowing for this, however, it is clear that returns of tobacco growers have been materially affected.

CHARLES E. GAGE.

Farmer Bankruptcies Decline

Farmer bankruptcies numbered 3,642 cases for the year ended June 30, 1936, compared with 4,311 for the year ended June 30, 1935. This was

a decrease of 15 percent. In the year ending June 30, 1933, 5,917 farmers went into bankruptcy.

Eggs on the Block

PRODUCTION of eggs in the Northeastern States falls far short of requirements for the large urban population, so this section is dependent for part of its supply of eggs upon more distant producing areas. In recent years large numbers of high-quality, graded eggs from the west coast have come into this part of the country. As a result of the competition between nearby eggs and those of other origin, the quality of eggs marketed has improved. One of the important developments in marketing eggs that has facilitated the improvement in quality has been the organization of egg auctions.

The growth of egg auctions in the Northeastern States has taken place mostly in the last 6 or 7 years. There are now approximately 25 such auctions operating in various New England and Middle Atlantic States and in Ohio. They are principally cooperative organizations, and their operations are limited to local and nearby production. Some of them, however, draw eggs from producing sections within a range of 60 miles or more. A few of these auctions deal in poultry, too, but generally not to a large extent.

Under the auction plan of marketing, local producers deliver their eggs to a central point, regularly, where they are inspected, graded, and prepared for sale by the usual auction methods to highest bidders. Buyers are individuals or firms who are in the market for good eggs, and who are willing to pay for quality. These buyers may be producers whose own production is not sufficient to supply their own regular trade, or others, such as hucksters, who sell direct to consumers. They may also include market dealers who have a need for

high-quality eggs and who have found the egg auction a place where such eggs may be secured regularly.

Auctions usually operate 2 days each week, either Monday and Thursday, or Tuesday and Friday. The eggs sold are inspected according to State grades, which follow Federal grades generally, with some differences in tolerance and terminology. Each producer's lot is sold separately, and buyers show some preference for lots from producers whose eggs are known to run exceptionally uniform, or which are in the upper weight classification of a grade.

PRODUCERS' costs of selling on auctions vary but are less than the average shipping charges to a terminal market. Some producers deliver their eggs direct to the auction, others use trucking routes or express.

Prices on the various auctions are naturally influenced by prices in the larger terminal markets, for these are alternative outlets. Information regarding the prices at which auctioned eggs are sold is available in the press and is also published in the market reports of the Bureau of Agricultural Economics.

One of the principal results of the auction method of selling is the improvement in quality, through better care in production, more frequent gathering of eggs, better handling, and more careful grading on the farms. The marketing of high quality eggs is stimulated because buyers pay according to variations in quality. Producers have found auctions desirable outlets for eggs because they are generally a steady outlet, and cash is obtained quickly for eggs sold.

L. M. DAVIS.

Factory Workers' Buying Power Up

FACTORY pay rolls per employed worker rose sharply in April to approximately the 1924-29 average. The rise from March 1933 to April 1937 was nearly five times as great as the increase in living costs. As a result of this greater rise in income than in living costs the employed factory worker's real income is now about half again as high as at the depression low and 19 percent higher than in 1929.

Nonagricultural income as a whole extended further in April the steady advance which started with March 1936. After correction for nonfarm population growth and for living costs, nonagricultural income is now 30 percent higher than in early 1933 and

is only 3 percent lower than the monthly average for 1929.

Production in factories using farm products as raw materials receded slightly in April but is still above any point ever reached prior to last November. Factories processing non-agricultural products increased output in April to a new recovery peak.

If the rate of gain in nonagricultural income for the first 4 months of 1937 is maintained for the entire year, retail expenditures for food products may be expected to increase about 1½ billion dollars. This would leave 5 billion dollars additional for purchases of industrial products.

P. H. BOLLINGER.

Measures of Domestic Demand
[1924-29=100]

	April				Percent change		
	1929	1933	1936	1937	1936-37	1933-37	1929-37
Nonagricultural income: ¹							
Total.....	106.2	58.9	80.8	91.1	+13	+55	-14
Per capita.....	101.3	54.4	72.7	81.2	+12	+49	-20
Factory pay rolls:							
Total.....	108.8	38.4	76.6	101.2	+32	+164	-7
Per employed wage earner.....	103.3	61.1	86.4	99.5	+15	+63	-4
Industrial production:							
Total.....	113.3	61.8	94.6	110.1	+16	+78	-3
Factories processing farm products.....	109.5	91.7	98.2	113.5	+16	+24	+4
Other factory production.....	116.4	46.1	91.6	108.1	+18	+134	-7
Construction activity:							
Contracts awarded, total.....	101.7	11.6	38.8	46.3	+19	+299	-54
Contracts awarded, residential.....	89.6	9.0	26.9	43.0	+60	+378	-52
Employment in production of building materials.....	95.2	33.5	52.9	65.8	+24	+96	-31
Cost of living: ¹							
Food.....	97.1	57.9	76.5	82.4	+8	+42	-15
"All other items".....	98.5	80.8	82.0	84.2	+3	+4	-15
Purchasing power of nonagricultural income per capita: ¹							
For food.....	104.3	94.0	95.0	98.5	+4	+5	-6
For "All other items".....	102.8	67.3	88.7	96.4	+9	+43	-6

¹ These indexes, as well as the index of nonfarm population used in converting nonagricultural income to a per-capita basis, have been revised; tables containing the revised data may be had on request.

NOTE — All indexes adjusted for seasonal variation except "Cost of living."

Consumer Co-ops

Last year 2,000,000 United States families saved money by buying through cooperatives. Consumer co-operatives did a gross business of half a billion dollars in 1936. But compared with Great Britain, this

country is only a beginner. Sixty-four percent of Great Britain's population bought through cooperative stores last year. Over 60 percent of Britain's food imports were sold through this form of merchandising.

General Trend of Prices and Wages

[1910-14=100]

Year and month	Whole-sale prices of all commodities ¹	Industrial wages ²	Prices paid by farmers for com- modities used in ³ —			Farm wages	Taxes ⁴
			Living	Produc- tion	Living and produc- tion		
1920.....	225	222	222	174	201	239	209
1921.....	142	203	161	141	152	150	223
1922.....	141	197	156	139	149	146	224
1923.....	147	214	160	141	152	166	228
1924.....	143	218	159	143	152	166	228
1925.....	151	223	164	147	157	168	232
1926.....	146	229	162	146	155	171	232
1927.....	139	231	159	145	153	170	238
1928.....	141	232	160	148	155	169	239
1929.....	139	236	158	147	153	170	241
1930.....	126	226	148	140	145	152	238
1931.....	107	207	126	122	124	116	217
1932.....	95	178	108	107	107	86	188
1933.....	96	171	109	108	109	80	161
1934.....	109	182	122	125	123	90	153
1935.....	117	191	124	126	125	98	⁵ 154
1936.....	118	199	122	126	124	107	-----
1936.....							
May.....	115	195	-----	-----	121	-----	-----
June.....	116	196	121	120	120	-----	-----
July.....	118	198	-----	-----	123	108	-----
August.....	119	202	-----	-----	126	-----	-----
September.....	119	198	123	132	127	-----	-----
October.....	119	202	-----	-----	127	110	-----
November.....	120	201	-----	-----	127	-----	-----
December.....	123	211	124	133	128	-----	-----
1937.....							
January.....	125	209	-----	-----	130	103	-----
February.....	126	211	-----	-----	132	-----	-----
March.....	128	218	127	139	132	-----	-----
April.....	128	219	-----	-----	⁵ 134	112	-----

Year and month	Index numbers of farm prices [August 1909-July 1914=100]								Ratio of prices received to prices paid
	Grains	Cotton and cotton- seed	Fruits	Truck crops	Meat ani- mals	Dairy prod- ucts	Chick- ens and eggs	All groups	
1920.....	232	248	191	-----	174	198	223	211	105
1921.....	112	101	157	-----	109	156	162	125	82
1922.....	106	156	174	-----	114	143	141	132	89
1923.....	113	216	137	-----	107	159	146	142	93
1924.....	129	212	125	150	110	149	149	143	94
1925.....	157	177	172	153	140	153	163	156	99
1926.....	131	122	138	143	147	152	159	145	94
1927.....	128	128	144	121	140	155	144	139	91
1928.....	130	152	176	159	151	158	153	149	96
1929.....	120	144	141	149	156	157	162	146	95
1930.....	100	102	162	140	133	137	129	126	87
1931.....	63	63	98	117	92	108	100	87	70
1932.....	44	47	82	102	63	83	82	65	61
1933.....	62	64	74	105	60	82	75	70	64
1934.....	93	99	100	104	68	95	89	90	73
1935.....	103	101	91	127	118	108	117	108	86
1936.....	108	100	100	113	121	119	115	114	92
1936.....									
June.....	87	96	115	99	120	106	103	107	89
July.....	109	105	117	115	119	116	106	115	93
August.....	129	103	108	134	123	125	112	124	98
September.....	130	106	105	153	123	128	119	124	98
October.....	128	104	104	131	120	125	127	121	95
November.....	127	103	97	104	118	126	141	120	94
December.....	134	105	93	99	122	127	133	126	98
1937.....									
January.....	143	107	105	115	128	128	110	131	101
February.....	146	108	127	143	126	126	101	127	96
March.....	145	116	133	131	129	125	102	128	97
April.....	154	117	142	127	130	120	104	130	97
May.....	149	112	152	139	133	116	96	⁵ 128	⁵ 96

¹ Bureau of Labor Statistics Index with 1926=100, divided by its 1910-14 average of 68.5.

² Average weekly earnings, New York State factories. June 1914=100.

³ These indexes are based on retail prices paid by farmers for commodities used in living and production reported quarterly for March, June, September, and December. The indexes for other months are inter-
polations between the successive quarterly indexes.

⁴ Index of farm real estate taxes, per acre, 1913=100.

⁵ Preliminary.

The Trend of Farm Exports and Imports

EXPORTS

Year and month (ended Dec. 31)	Wheat, including flour ¹	Tobacco (leaf)	Bacon, ² hams, and shoulders	Lard ³	Apples (fresh)	Cotton running bales ⁴
	<i>1,000 bushels</i>	<i>1,000 pounds</i>	<i>1,000 pounds</i>	<i>1,000 pounds</i>	<i>1,000 bushels</i>	<i>1,000 bales</i>
Total:						
1929.....	154,348	555,347	275,118	829,328	16,856	7,418
1930.....	149,154	560,958	216,953	642,486	15,850	6,474
1931.....	125,686	503,531	123,246	568,708	17,785	6,849
1932.....	82,118	387,766	84,175	546,202	16,919	8,916
1933.....	26,611	420,418	100,169	579,132	11,029	8,533
1934.....	36,538	418,983	83,725	431,237	10,070	5,753
1935.....	15,731	381,182	61,691	96,355	11,706	5,861
1936.....	19,079	406,810	46,534	111,292	8,897	5,409
1936 (Prel.):						
April.....	1,423	23,784	3,396	9,489	750	353
May.....	1,534	17,106	5,367	10,837	291	352
June.....	1,382	19,653	5,955	11,090	130	297
July.....	1,389	19,984	7,194	7,481	179	156
August.....	1,666	26,441	4,159	6,045	178	182
September.....	2,415	46,336	2,526	7,857	482	569
October.....	2,436	63,052	2,234	10,454	1,420	862
November.....	1,285	46,732	4,311	9,563	1,078	690
December.....	1,731	38,998	2,611	9,384	853	594
1937 (Prel.):						
January.....	1,576	31,982	2,018	8,804	912	538
February.....	1,522	22,695	2,749	4,456	715	486
March.....	1,565	24,840	3,546	7,324	472	468
April.....	1,699	23,073	4,161	8,245	316	373

¹ Wheat flour is converted on a basis of 4.7 bushels of grain equal to 1 barrel of flour.

² Includes Cumberland and Wiltshire sides.

³ Excludes neutral lard.

⁴ Excludes linters.

IMPORTS ¹

Year and month (ended Dec. 31)	Cattle, live	Beef, canned, including corned ²	Butter	Wheat, grain ² ³	Corn, grain	Oats, grain	Barley, malt ²
	<i>1,000 head</i>	<i>1,000 pounds</i>	<i>1,000 pounds</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>	<i>1,000 pounds</i>
Total:							
1929.....	505	79,899	2,773	36	407	112	1,025
1930.....	234	56,105	2,472	317	1,556	183	4,309
1931.....	95	19,586	1,882	54	618	576	39,875
1932.....	106	24,639	1,014	3	344	59	52,533
1933.....	82	41,344	1,022	31	160	132	109,183
1934.....	66	46,674	1,253	7,737	2,959	5,580	193,728
1935.....	378	76,263	22,675	27,439	43,242	10,107	320,623
1936.....	410	87,764	9,874	39,669	31,471	149	301,767
1936 (Prel.):							
April.....	79	11,897	661	1,536	1,052	11	21,642
May.....	57	8,654	224	1,627	938	22	27,300
June.....	47	7,034	168	3,028	34	2	24,256
July.....	34	7,503	308	4,477	1,301	1	31,811
August.....	19	8,938	1,182	6,294	1,549	(⁴)	29,018
September.....	23	6,439	539	4,604	4,144	13	24,922
October.....	21	8,994	648	4,216	8,122	22	26,200
November.....	15	3,703	1,361	3,200	6,263	47	28,715
December.....	13	1,764	1,155	3,385	4,430	20	39,006
1937 (Prel.):							
January.....	51	1,174	2,390	1,866	5,410	9	34,676
February.....	44	3,511	2,915	1,666	8,653	7	30,136
March.....	49	7,123	2,534	1,408	9,458	19	63,090
April.....	57	10,446	1,130	1,091	6,211	6	47,157

¹ General imports prior to 1934; beginning Jan. 1, 1934, imports for consumption.

² Imports for consumption.

³ For domestic consumption and includes only wheat full duty paid and 10 percent ad valorem.

⁴ Less than 500.

Statistics on exports and imports for the years 1920-28 are contained in the February 1937 issue of the Agricultural Situation.

Compiled from Foreign Commerce and Navigation of the United States and official records of Bureau of Foreign and Domestic Commerce.